

**Amendments to the Claims:**

The following listing of claims will replace all prior listings of claims in the application:

**Listing of Claims:**

1. to 23. (canceled)

24. (currently amended) A patch comprising:

- a) a first layer comprising an oxygen barrier having an oxygen transmission rate of no more than 100 cc/m<sup>2</sup>/24hr at 25°C, 0% RH, 1 atm (ASTM D 3985);
- b) a second layer comprising an a pressure sensitive adhesive, the adhesive adhered to the first layer; and
- c) an oxygen indicator, disposed on the second layer, comprising a luminescent compound;

wherein the oxygen indicator is disposed as a printed image on the second layer.

25. (previously presented) The patch of claim 24 wherein the oxygen barrier comprises a material selected from the group consisting of polyester, polyamide, ethylene vinyl alcohol copolymer, polyvinyl alcohol homopolymer, polyvinyl chloride, homopolymer and copolymer of polyvinylidene chloride, polyethylene naphthalate, polyacrylonitrile homopolymer and copolymer, liquid crystal polymer, SiO<sub>x</sub>, carbon, metal, and metal oxide.

26. (canceled)

27. (previously presented) The patch of claim 24 wherein the luminescent compound comprises at least one material selected from the group consisting of metallo derivatives of octaethylporphyrin, tetraphenylporphyrin, tetrabenzoporphyrin, or the chlorins, bacteriochlorins, or isobacteriochlorins thereof.

28. (canceled)

29. (new) A patch comprising:
- a) a first layer comprising an oxygen barrier having an oxygen transmission rate of no more than 100 cc/m<sup>2</sup>/24hr at 25°C, 0% RH, 1 atm (ASTM D 3985);
  - b) a second layer comprising an adhesive, the adhesive adhered to the first layer; and
  - c) an oxygen indicator, disposed on the second layer, comprising a luminescent compound;
- wherein the oxygen indicator is disposed as a printed image on the second layer comprising the adhesive; and
- wherein the oxygen indicator is not coextensive with the second layer comprising the adhesive.

30. (new) The patch of claim 29 wherein the oxygen barrier comprises a material selected from the group consisting of polyester, polyamide, ethylene vinyl alcohol copolymer, polyvinyl alcohol homopolymer, polyvinyl chloride, homopolymer and copolymer of polyvinylidene chloride, polyethylene naphthalate, polyacrylonitrile homopolymer and copolymer, liquid crystal polymer, SiO<sub>x</sub>, carbon, metal, and metal oxide.

31. (new) The patch of claim 29 wherein the adhesive comprises a material selected from the group consisting of hot melt adhesive, silicone adhesive, acrylic pressure sensitive adhesive, solvent cast adhesive, ultraviolet cured acrylic adhesive, and electron beam cured acrylic adhesive.

32. (new) The patch of claim 29 wherein the luminescent compound comprises at least one material selected from the group consisting of metallo derivatives of octaethylporphyrin, tetraphenylporphyrin, tetrabenzoporphyrin, or the chlorins, bacteriochlorins, or isobacteriochlorins thereof.

33. (new) A patch comprising:
- a) a first layer comprising an oxygen barrier having an oxygen transmission rate of no more than 100 cc/m<sup>2</sup>/24hr at 25°C, 0% RH, 1 atm (ASTM D 3985);

- b) a second layer comprising an adhesive, the adhesive adhered to the first layer; and
  - c) an oxygen indicator, disposed on the second layer, comprising a luminescent compound;
- wherein the oxygen indicator is disposed as a printed image on the second layer; and
- wherein the patch is adapted to be adhered, by means of the adhesive, to a packaging material.

34. (new) The patch of claim 33 wherein the oxygen barrier comprises a material selected from the group consisting of polyester, polyamide, ethylene vinyl alcohol copolymer, polyvinyl alcohol homopolymer, polyvinyl chloride, homopolymer and copolymer of polyvinylidene chloride, polyethylene naphthalate, polyacrylonitrile homopolymer and copolymer, liquid crystal polymer, SiO<sub>x</sub>, carbon, metal, and metal oxide.

35. (new) The patch of claim 33 wherein the adhesive comprises a material selected from the group consisting of hot melt adhesive, silicone adhesive, acrylic pressure sensitive adhesive, solvent cast adhesive, ultraviolet cured acrylic adhesive, and electron beam cured acrylic adhesive.

36. (new) The patch of claim 33 wherein the luminescent compound comprises at least one material selected from the group consisting of metallo derivatives of octaethylporphyrin, tetraphenylporphyrin, tetrabenzoporphyrin, or the chlorins, bacteriochlorins, or isobacteriochlorins thereof.